

# INL *Intelligence*

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**A high-level monthly briefing on operations and activities at the U.S. Department of Energy's Idaho National Laboratory**  
Work at the lab advances the Department's strategic goals in the areas of energy, environment, defense and science.

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## ■ Lab Directors Explain Scientific Merits of Global Nuclear Energy Partnership

The directors of nine of the Department of Energy's national laboratories – including INL – met with national media and congressional leaders in Washington, D.C. in early May to discuss the scientific goals and merits of the Global Nuclear Energy Partnership. In his prepared remarks, INL Director John Grossenbacher said, "We will be developing and demonstrating in the U.S. new recycling technologies for spent nuclear fuel that may produce more energy, reduce nuclear waste and address proliferation concerns. We also will be working on a new generation of reactors with inherently safe features suitable for fueling the economies of the developing world." The Global Nuclear Energy Partnership is part of President Bush's Advanced Energy Initiative.

## ■ INL Honored with Special Leadership Award

Twenty-five INL researchers were honored with a SCADA Leadership Award at the recent Process Control and SCADA Summit sponsored by the SANS Institute. INL received the award for establishing and operating multiple, real-world infrastructure test beds that allow private utility vendors, asset owners and INL researchers to identify and fix vulnerabilities in supervisory control and data acquisition (SCADA) systems. These systems are the computer-based operating consoles that control power distribution and resources to the electric power grid, water treatment facilities and oil and gas refineries. Though efficient and reliable, these systems often lack sufficient cybersecurity measures. The award was presented to INL by U.S. Rep. Dan Lungren, a member of the House Homeland Security Committee. Since 2002, INL has had a comprehensive initiative to develop solutions for securing the nation's critical infrastructures from physical and cyber threats.

## ■ Laboratory's Testing Capabilities Strengthened

One of the world's leading nuclear energy companies has donated an important piece of testing equipment to INL. AREVA, Inc., provided and installed state-of-the-art eddy current measurement equipment that allows INL researchers to nondestructively evaluate the structural performance of nuclear fuel cladding to provide the information needed to help extend fuel life. Extending the life of nuclear fuel has economic and environmental benefits. Utilities can purchase fewer fuel assemblies to power their reactors if a longer lifetime can be justified. Using fewer fuel assemblies means less spent fuel for storage and/or disposal.

## ■ Regional Students Focus on Physics

More than 6,000 students from 90 schools in Idaho, Utah, Nevada and Wyoming attended the 17th annual Utah State University/INL Physics Day event May 19 at Lagoon Amusement Park in Farmington, Utah. The daylong activity served as a unique educational approach to teaching fundamental physics concepts to middle school and high school students, using an amusement park as a laboratory. "It is great to see students having fun and becoming attracted to science and engineering. It is a great learning experience for everyone," said Ali Siahpush, advisory engineer/scientist and coordinator of the event for INL.

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